

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

see form PCT/ISA:220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day.month.year) see form PCT/ISA:210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA:220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2005/001464

International filing date (day.month.year)
10.02.2005

Priority date (day.month.year)
12.02.2004

International Patent Classification (IPC) or both national classification and IPC
F16C33/24

Applicant
FEDERAL-MOGUL WIESBADEN GMBH & CO. KG

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA:220.

3. For further details, see notes to Form PCT/ISA:220.

Name and mailing address of the ISA:



European Patent Office - Gitschiner Str. 103
D-10958 Berlin
Tel. +49 30 25901 - 0
Fax: +49 30 25901 - 840

Authorized Officer

Schaeffler, C

Telephone No. +49 30 25901-534



WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

10/588831

International application No.
PCT/EP2005/001464

iAP20 Rec'd PCT/PTO 09 AUG 2006

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating there has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/001464

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-4,6-18,21-25,29-33
	No: Claims	1,5,19,20,26-28
Inventive step (IS)	Yes: Claims	2-4,6-18,21-25,29-33
	No: Claims	1,5,19,20,26-28
Industrial applicability (IA)	Yes: Claims	1-33
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V.

Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

0. Reference is made to the following documents:

D1: GB	524,128 A	(ETTORE BUGATTI)	30 July 1940 (1940-07-30)
D2: DE	3,224,751 A	(OEXLE FRIEDRICH)	23 Febr 1984 (1984-02-03)

1. The document **D1** discloses (the references in parentheses applying to this document) a sliding bearing element comprising a backing (1) made of steel, said backing (1) is lined with a bearing material (7) and a soft material (4), wherein the bearing material (7) is capable of sustaining a bearing load and the soft material (4) is of anti-seizure quality, whereby the bearing material (7) bonded to the backing is disposed at least at the edges of the backing in form of wires (see **D1**, page 2, lines 113-126) in circumferential direction and the soft material (4) is located at least in a space between said wires (see **D1**, figure 6).

As the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT, the present application does not meet the criteria of Article 33(1) PCT.

2. Dependent claims 5, 19, 20 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the EPC with respect to novelty, the reasons being as follows:
- 2.1. Claim 1 of document **D1** discloses that the "... exposed surface of the ribs (is) lying flush with that of the lining", which means that the sliding surface is formed by the wires/ribs and the soft material. The subject-matter of dependent claim 5 is therefore not new in the sense of Article 33(2) PCT.
- 2.2. Document **D1** discloses further (see page 2, lines 9-16) that the soft material is a metal or a metal alloy, for instance a tin alloy. The subject-matter of dependent

claims 19 and 20 is therefore also not new in the sense of Article 33(2) PCT.

3. Document **D1** discloses further (see page 2, lines 113 - 126; the references in parentheses applying to this document) a method for producing a sliding bearing element comprising the processing steps of

- providing a strip of steel (1) or any other material having the required degree of strength which forms the backing of the bearing to be produced,
- bonding at least one wire (7) at each of the two edges of the backing strip (1) whereat disposing the wires (7) in such a manner that said wires (7) run in circumferential direction generally,
- filling out the spaces (4) between the wires with soft materials

The subject-matter of independent process claim 26 is therefore not new in the sense of Article 33(2) PCT.

4. The applicant's attention is further drawn to the fact that the subject matter of process claim 26 is also disclosed in document **D2** (see page 5, para. 2).
5. Dependent claim 27 and 28 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of the EPC with respect to novelty, as document **D2** discloses a sintering process (see page 5, para. 1) comprising the steps of continuously feeding the strip through an induction coil in which the steel is heated in a non oxidizing atmosphere to a temperature at which sintering takes place and dispensing the wires onto the strip surface within the induction coil such that the wires contact the strip surface as it reaches sintering temperature. The subject-matter of claims 27 and 28 is therefore also not new in the sense of Article 33(2) PCT.
6. The combination of the features of dependent claims 2-4, 6-18, 21-25 and 29-33 is neither known from, nor rendered obvious by, the available prior art.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/EP2005/001464

7. Claims 1-33 meet the requirements of the PCT with respect to industrial applicability (Article 33(4) PCT).